HRN-A-00-98-00044-00 Global Health Bureau
The CHANGE Project/The Manoff Group, Inc. 2618

Communication for Immunization and Polio Eradication in Mali:

A joint case study by UNICEF, WHO/AFRO and USAID

October 1999

Contents

Acknowledgements	2
Acronyms	
Introduction	
Background on the study	4
Country profile	
EPI in Mali	6
Historical context	6
National Immunization Days	8
Effective and creative actions	
Initiating intersectoral collaboration	9
Identifying an effective 'champion'	10
Involving traditional community leadership structures	11
Incorporating women's networks	
Involving non-governmental organizations	14
Utilizing a mix of media	14
Involving children	16
Programme challenges and needs for more effective social mobilization	
and communication support	16
Developing more cost-effective strategies	16
Prioritizing interpersonal communication and social networks	18
Increasing community involvement	
Adding basic health education to the communication strategy	
Identifying and utilizing gender-appropriate strategies	21
Assuring the complentarity of NIDs, EPI and surveillance	23
Improving monitoring and evaluation	25
Summary of lessons learned	
Annex A: Persons interviewed	27

Acknowledgements

The team would like to express its gratitude to UNICEF/Mali for organizing this case study, and to the National Immunization Center for its invaluable assistance in contacting people and organizations for interviews. We would also like to thank the many people who took time out of their busy schedules to participate in the interviews, even in the midst of their preparations for the National Immunization Days. We offer our special thanks to Mr. Amadou Toumani Touré, President of the National Steering Committee for the National Immunization Days.

Acronyms

AFP acute flaccid paralysis

BCG Bacille de Calmette et Guérin (anti-tuberculosis vaccine)

CNI Centre National d'Immunisation (National Immunization Center)

CNIECS Centre National d'Information, Education et Communication pour la Santé

(National Center for Information, Education and Communication for Health)

DPT3 Vaccine for diphtheria, pertussis and tetanus (third dose)

EPI expanded programme on immunization

ISCC Intersectoral Coordination Committee

MOH Ministry of Health

MOHSEP Ministry of Health, Solidarity and Elderly Persons

NGOs non-governmental organizations

NIDs National Immunization Days

OPV oral polio vaccine

UNICEF United Nations Children's Fund

USAID United States Agency for International Development

WHO/AFRO World Health Organization/Africa Regional Office

WRA women of reproductive age

Introduction

Background on the study

Purpose of the study

From 25 October to 12 November 1999, a four-person team studied communication and social mobilization support for polio eradication and routine immunization in Mali. This was the second of five national studies in Africa jointly planned and carried out by UNICEF, WHO/AFRO and USAID (CHANGE and BASICS).

The goal of this case study was to document recent experiences and lessons learned in the polio eradication effort and to share them among African countries and beyond. National Immunization Days (NIDs), which were in progress during the data collection phase, are a special focus of this study. The study highlights effective and creative ideas that have worked for the NIDs, important needs and issues that should be addressed, and discusses the experiences that could be effectively applied to improve routine immunization programmes and, in some cases, acute flaccid paralysis (AFP) surveillance.

Team members

The case study team consisted of Ms. Lydia Clemmons (team leader/CHANGE project), Dr. Haritiana Rakotomamonjy (UNICEF Headquarters' consultant), Dr. Adama Diawara (local consultant) and Mr. Alphani Sessoko (UNICEF/Mali staff member). CHANGE was the lead agency, providing the team leader, while UNICEF, with an institutional presence in Mali, provided all logistical support.

Methodology

The research methods used to conduct the case study were semi-structured in-depth individual interviews, unstructured group interviews, observations and document review. The team interviewed a total of approximately 25 people in Bamako (the capital of Mali), in the two regional capitals of Mopti and Sikasso and in four rural communes (two per region). Interview participants included high-level leaders from the civil society (including religious leaders), government and non-government administrators and health personnel, journalists and other representatives of the press, village town criers and *griots* (traditional praise-singers), mothers in rural areas and even children.

(Lists of persons interviewed and documents consulted are found in annexes A and B.) A list of questions, prepared in English and French, helped guide the interviews.

The team gave two debriefings, one for the National Organization Committee for NIDs on 11 November and one for USAID on 12 November 1999.

Advantages, limitations and constraints

Timing proved to be both advantageous and disadvantageous in conducting the case study. Arriving in time for the preparations for the first round of the 1999 National Immunization Days (NIDs) in Mali, the case study team members had the advantage of being able to attend several meetings of NIDs Steering and Organization Committees at national and regional levels. The team members were also able to listen to public service announcements about the NIDs on television and radio, track the daily newspaper coverage and observe social mobilization activities just prior to and during the NIDs.

Nevertheless, conducting the case study at this time also meant that many of the persons interviewed at national and regional levels were busy with preparations for the NIDs and had limited availability for interviews. Consequently, several interviews, as well as follow-up interviews in which the team hoped to obtain additional information, could not be conducted. The timing of the case study also coincided with UNICEF/Mali's annual review and planning meetings, which severely limited the availability of UNICEF staff who had originally been identified as team members.

Country profile

Geographic and demographic description

Located in West Africa, the Republic of Mali borders Algeria, Burkina Faso, Côte d'Ivoire, Guinea, Mauritania, Niger and Senegal. Mali covers an area of 1,241,231 square kilometres.

The population of Mali is approximately 9,801,307, of which there are about 392,844 children one year old and younger, and 2,099,862 women of reproductive age. The infant mortality rate is 122/1,000, while the fertility rate is 6.7, with a variation between 4.7 in Bamako (the capital city) and 7.3 in rural areas (DHS II: 1995-1996). Formal education is low: only 11.9 per cent of WRA

have a primary school education, and only 7 per cent have a secondary school education or higher. Men's formal education is somewhat higher: 15.6 per cent of men between the ages of 15 and 59 have a primary school education, and 15.2 per cent have a secondary school education or higher. Only 23 per cent of men and 11 per cent of women are literate.

Current political context

During the same time period that the steering and organizing committees were meeting to prepare for the NIDs, the President of the Republic of Mali, Alpha Konare, announced a new political commitment to abolish corruption in the government. The war against corruption was a major news topic, covered daily by all of the media, and was part of daily conversation among government employees and the general public. Days before the team's arrival, two high-level government officials had been removed from their posts because of alleged corruption and speculation and rumours were rampant in the media concerning who would be the next officials to be removed from their posts.

Administrative organization

The Republic of Mali is administratively divided into eight regions and one district (Bamako, the capital city). The High Commissioner is the representative of each region, appointed by the government. Regions are divided into circles (*cercles*), whose representatives are delegates, also appointed by the government. Circles are divided into communes, whose representatives are mayors, elected by the voting public. Communes are divided into villages (in rural areas) and neighbourhoods (in urban areas). Most government sectors, including the Ministry of Health (MOH), have decentralized lines of authority along these administrative divisions, from the national level to the level of the communes. Villages and neighbourhoods are locally governed by traditional authority.

EPI in Mali

Historical context

The expanded programme on immunization (EPI) in Mali began in December 1986. Extremely vertical in nature, the early programme had a budget, strategy, personnel and resources that remained separate from the rest of the health sector infrastructure until 1995, when a new policy was developed to integrate EPI more closely with other public health programmes.

Numerous institutional and management problems in Mali's EPI have already been clearly identified in MOH policy documents and in a recent evaluation (April 1999). Among the most important of these problems are¹:

limited resources, including:

- insufficient funds
- inadequate cold chain
- insufficient supplies of materials and equipment
- frequent stock-outs of vaccines
- over 80 per cent of the 49 circle-level health centres do not have electricity;

poor management, including:

- overly centralized management
- a lack of direction and leadership in the EPI programme at all levels
- mismanagement of logistical and financial resources
- insufficient coordination between the different partners; and

inadequate quality of care and performance problems among health personnel, including:

- low work ethic among health personnel/lack of motivation; lack of system to encourage performance
- inadequate level of EPI-related knowledge and skills among health personnel

¹ "Document de politique nationale et de normes techniques du programme elargi du vaccination au Mali" (draft, October 1995). Ministère de la Santé, de la Solidarité et des Personnes agées, Direction Nationale de la Santé Publique, Centre Nationale d'Immunisation.

- high rate of vaccine loss (25-30 per cent)
- lack of follow-up/tracking of drop-outs (little use of data as part of vaccination strategy).

An obvious consequence of these and other problems inherent in Mali's EPI is a low coverage rate. According to a recent EPI evaluation report (April 1999), the national coverage rate of children between 12 and 23 months of age who are completely immunized against the diseases covered by the EPI programme is only 46 per cent. The national drop-out rate is considerable: while 85 per cent of children in this age group had a first immunization, only 55 per cent receive measles or DPT3. In some regions of Mali, the drop-out rate is far worse. While the coverage rate for first dose of DPT remains at about 85 per cent, only about 33 per cent receive the third dose.

Table 1: National vaccination coverage rates for EPI in Mali (per cent)

Year	BCG	DPT3/OPV3	Measles
1992	69.84	37.70	35.16
1993	76.82	46.35	50.75
1994	67.23	38.93	45.69
1995	80.10	48.99	52.32
1996	78.84	52.32	56.71
1997	76.41	26.17	56.36

National Immunization Days

National Immunization Days were first organized in Mali in 1997 and have been held annually since then, in the months of November and December. While the duration of the NIDs is two days in most of the country, some regions with particularly hard-to-reach areas hold NIDs over a five-or six-day period.

Vitamin A drops were introduced in the Mopti region during the 1997 NIDs, and then adopted nationally in 1998 as part of the NIDs strategy. Measles immunizations were integrated into the

NIDs strategy in one region (Kidal) and in some areas of the capital city in 1998. All regions of Mali and the capital city of Bamako had integrated vitamin A drops and measles immunization in the NIDs by the end of 1999. The total target population for Mali's 1999 NIDs was 2,022,776 children 59 months of age and younger. Coverage rates throughout most of the country have been well over 100 per cent since the first NIDs organized in 1997. In the northern regions of Gao and Kidal, which have hard-to-reach populations, coverage rates have increased dramatically over three years of NIDs.

Table 2: Vaccination coverage rates for NIDs in Mali: Children 0-5 years of age (per cent)

Region	1997	1997	1998	1998
	1st dose	2nd dose	1st dose	2nd dose
National	113.5	117.4	113	119
Bamako	118	124	117	123
Kayes	106	110	99	100
Koulikoro	114	120	127	131
Sikasso	130	126	118	131
Segou	111	115	114	117
Mopti	121	115	110	113
Tomboctou	94	108	107	113
Gao	85	112	98	110
Kidal	56	60	89	116

Source: NIDs reports.

Effective and creative actions

Initiating intersectoral collaboration

Among the most noteworthy aspects of Mali's social mobilization strategy is the effort to institutionalize intersectoral collaboration in the coordination and management of the NIDs. Numerous sectors of the government (including such diverse sectors as agriculture, education and the military), as well as a variety of branches of civil society (including religious institutions, non-governmental organizations and the press), are represented on a National Steering Committee and a National Organizing Committee. Intersectoral NIDs steering committees and organizing committees have also been established in each region.

The main functions of the Steering Committee are to establish guidelines, advocate for resources and oversee the general preparations for the NIDs. The Organization Committee's tasks,

meanwhile, entail the technical planning, implementation and management of immunization, social mobilization and communication activities.

Such intersectoral structures do risk having the potential disadvantage of excessive bureaucracy and limited effectiveness. In Mali, committee meetings at the national level tended to be overwhelmed with administrative details and had less time for clarifying larger, strategic issues. For example, during one meeting of the National Steering Committee, members spent nearly an hour reviewing and revising minutes from the previous meeting. At the regional level, the performance of the steering and organization committees varied widely. In the Mopti region, for example, it was clear that the steering committee was barely functioning and had met only once in 1999 (one week before the NIDs). Most of the members present at that meeting had little or no information about decisions, planning and financial management concerning the NIDs.

Nevertheless, both of the NIDs committees at the national level, as well as some regional-level committees, as in the case of Sikasso, demonstrated an impressive ability to rapidly translate decisions into collaborative actions by the different member organizations. Intersectoral structures therefore merit consideration as a model for NIDs, EPI and other health programme strategies, for they could, if well executed, have considerable impact in advocacy, planning and action.

Identifying an effective 'champion'

The presence of a 'champion' (a person who has the power to lobby for a cause effectively) is a key factor in the success of any programme. General Amadou Toumani Touré, President of the National Steering Committee for the NIDs, is just such a champion. With a unique reputation as both a national hero and a children's advocate, the former President of the Republic of Mali and a high-ranking official in the military has added an element of celebrity to the NIDs by increasing their visibility and importance. General Touré, who retired from the military and founded a charity and hospital for children, attributes his motivation for presiding over the National Steering Committee to his personal commitment to improve the health and welfare of children. His charismatic leadership has meant effective advocacy for the NIDs and a guarantee that decisions made by the Steering Committee are carried out with alacrity at the national level.

Identifying a 'champion' who has a strong commitment to programme goals was thus an important first step towards an effective social mobilization strategy in Mali.

Involving traditional community leadership structures

Nomadic populations

Nomadic groups in Mali present unique challenges as both hard-to-reach and hard-to-convince populations. After observing the low turn-out of nomadic populations for the first NIDs organized in the northern region of Kidal in 1997, several partners, including the MOH, UNICEF and non-governmental organizations (NGOs), worked together to involve the nomadic groups' traditional leaders in planning a social mobilization strategy for the north in 1998 and 1999. The process began by holding seminars for the traditional chiefs of the nomadic clans to increase their knowledge about immunization and the purpose of the NIDs. Following these seminars, the nomadic clan chiefs actively participated in the logistical planning for the NIDs and in informing and mobilizing their communities for participation. Due to this new level of involvement of traditional community leaders, turn-out and coverage rates for the NIDs doubled.

Rural populations

In rural areas throughout Mali, mayors at the commune level organized meetings with village chiefs to inform them of the NIDs and to solicit their collaboration. The involvement of village chiefs set into motion a traditional communication system in which every household in a given community received information through door-to-door visits, town criers or word-of-mouth from neighbour to neighbour. Communication through these traditional community structures proved to be far more effective than mass media, including television and print materials, in informing and mobilizing rural communities.

Reaching hard-to-reach populations

Extremely heavy rains in Mali led to unprecedented flooding in the region of Mopti. In some areas, 100 per cent of the roads and paths were inaccessible. Although initial logistical and financial planning had foreseen the use of vehicles and motorcycles, access by land was virtually impossible and the region was suddenly confronted with the need to develop an emergency plan.

A month before the NIDs were scheduled to be held, health authorities in Mopti requested

additional funds from the National Steering Committee to cover the unanticipated costs of renting water transportation (canoes and outboard motorboats). When the National Steering Committee refused their request (due to constraints in the national budget), Mopti authorities decided to launch a creative and highly effective social mobilization strategy. With less than two weeks to prepare for the NIDs, village chiefs, four local radio stations and nearly 70 community health associations (ASACOs), mobilized communities to contribute the resources needed for water transportation. Outboard motorboats, traditional canoes, oarsmen and fuel transport immunization teams, vaccines and equipment from village to village. Without these important community contributions, the November NIDs would have been postponed in the region.

While the level of community participation in Mali's social mobilization strategy is usually passive (i.e., limited to simply attending the NIDs or routine immunization clinics), the examples above are remarkable exceptions that underline the importance of communities' active and early involvement in planning, organizing and troubleshooting.

Incorporating women's networks

Women's informal networks

Although women's informal networks were not initially identified as resources for the communication and social mobilization strategies, there is ample evidence that these networks turned out to be among the most effective means of increasing attendance at the NIDs. Many women interviewed, particularly in rural areas, did not learn about the NIDs from any of the media and materials developed for the communication and social mobilization strategies (especially television, radio, the written press and print materials). On the contrary, observations and interviews conducted in the Mopti region suggest that women in rural areas usually learned about the NIDs at the very last minute while they were at home or on their way to wells, fields and marketplaces. Women received this information by word of mouth from other women, on the first morning of the NIDs.

In the rural commune of Bankass, nearly 80 per cent of children five years and under had already arrived at many of the vaccination posts within the first two hours of the NIDs and received their drops of poliomyelitis vaccine and vitamin A. This rapid mobilization occurred even in the absence of a launching ceremony, an activity that had received a lot of attention in logistical and financial planning in steering and organizing committees' meetings at the national and regional levels.

This evidence illustrates that the combined effects of interpersonal communication and group behaviour can have an immediate and dramatic impact on an individual woman's behaviour. Even without exposure to mass media, women quickly brought their own children to the NIDs simply because they heard other women talking about the NIDs and saw them bringing their children to be immunized.

Formal networks for women

Formal structures and networks organizing women exist throughout Mali. Many of these are supported by the Coordinating Organization for Women's Associations (CAFO), a formal non-government structure that organizes women's associations from the national level all the way to the level of villages and neighbourhoods. In the region of Mopti, there are some 112 women's associations, of which 67 are members of CAFO. As part of the social mobilization strategy for the NIDs, CAFO provides a brief orientation and training for two representatives from each of the 67 member associations (a total of 134 women representatives), who then conduct door-to-door visits to inform and mobilize women.

The role of women's formal networks has increased gradually over the three years of the NIDs. CAFO and other formal structures could be extremely instrumental in adding the important ingredient of education that is currently missing in Mali's communication and social mobilization strategies. Their potential highlights the importance of strengthening the capacity of these structures in future NIDs as well as in the routine immunization programme.

Women mobilize their children for NIDs attendance

Even women who were unable to attend the NIDs made sure to delegate one of their older children to take their younger siblings to be immunized. Amadou, for example, is a 14-year-old schoolboy who attended the NIDs in the rural commune of Bankass with his two younger brothers, aged five and four. He said he was at the NIDs because his mother was busy and told him to bring his siblings. He had already heard about the NIDs on the radio and knew that it was for children aged five and under. He also knew that the NIDs protect children against polio, but had not heard about vitamin A. Amadou's father is a schoolteacher, which may partially explain the boy's relatively high level of information about the NIDs.

Mariama, a 10-year-old girl, brought her younger brother to the NIDs while their mother stayed home to cook. Mariama knew nothing about immunizations and had no idea what diseases they prevented. She had no idea what vaccines her brother had just received at the NIDs site. Although

she had very little information, Mariama, like Amadou, followed her mother's instructions to bring her younger sibling to the NIDs.

Involving non-governmental organizations

The National Pivot Group (Groupe Pivot – Santé et Population) offers a unique resource for social mobilization and communication strategies at the community level through its coordination of the activities of more than 100 local and international NGOs in Mali. The Pivot Group is a member of both the National Steering Committee and the National Organizing Committee for the NIDs. In collaboration with the National Center for Information, Education and Communication for Health (CNIECS), the Pivot Group also produced a video on EPI.

Many NGOs independently support NIDs and EPI through information, education and communication (IEC) activities and help train village volunteers who provide assistance at vaccination sites. Plan International, for example, supports a number of local NGOs, whose village volunteers' activities include giving group talks and doing home visits to educate people about family planning, AIDS and nutrition. To support EPI in its programme areas, Plan International has: (1) funded the cold chain; (2) renewed vaccination equipment; (3) purchased mopeds and repaired vehicles; and (4) paid per diem for the vaccination teams. To support the NIDs, Plan International contributed funds to cover the costs of per diem and fuel and has trained NGO volunteers to add immunization to their repertoire of topics for educational talks.

Other international NGOs, such as Save the Children Fund/USA, Save the Children Fund/UK, GTZ, CARE, SNV and Africare all co-fund or provide material support to the NIDs and the EPI programme in their respective project areas. Additional types of support from NGOs include providing human resources to assist in transport, vaccinations, IEC and assistance in social mobilization at the community level.

Utilizing a mix of media

Mali's NIDs' social mobilization and communication strategies have utilized a mix of media, including radio, television, newspapers, t-shirts, banners, stickers and interpersonal communication. In terms of investments of funds, time and human resources, television and radio have been the media of choice. A considerable amount of available funds has been devoted to

paying the national television station and radio stations for news coverage and public service announcements.

Following a coup d'etat in 1991 and the establishment of a new democratic government, Mali has experienced a rapid increase in the privatization of the press, specifically newspapers and local radio stations. Television has not yet been privatized in Mali, although some foreign channels and programmes are available through satellite broadcast. Television receives a considerable proportion of the funds dedicated to the NIDs communication strategy. While quite appropriate for urban and semi-urban populations, television nonetheless reaches only about one third (33 per cent) of the population in Mali and is inaccessible to most rural populations. Public information announcements in French and in 10 local languages were repeatedly broadcast on television during the weeks prior to the NIDs to urge mothers to bring their children for immunizations against poliomyelitis.

While local newspapers regularly published information and articles about the NIDs, their potential impact population was limited due to high rates of illiteracy (over 85 per cent) in the country.

Of all of the mass media, radio has several unquestionable advantages: (1) a wide geographic broadcast area; (2) broadcasts in local languages; and (3) the high level of interest of audiences who enjoy listening to information on local issues. A special public service announcement was recorded at the national level in French and eight local languages by CNIECS, and distributed to radio stations throughout the country. UNICEF and CNIECS also organized short seminars for radio journalists to train them in communication skills and information related to the NIDs. Local radio stations have an important role in the communication strategy, particularly in urban and semi-urban areas where both men and women heard information about the NIDs. In rural areas, however, it seems that radio is a more appropriate media for men, who listen more frequently to it than do women. In some cases, radio broadcast actually facilitated Mali's oral tradition by transmitting personal messages from village chiefs and their advisers urging their communities to attend the NIDs.

The NIDs strategy has utilized some community-based human resources for interpersonal communication. These resources, which include town criers, women's associations, village chiefs

and religious leaders, appear to be more effective than the mass media and print materials, particularly in rural areas.

The strategy to use a mix of media to promote communication and social mobilization for the NIDs merits recognition. This strategy would be more effective in the future, however, if the coverage rates, gender and other characteristics of target audiences were more carefully considered during the selection of media and the development of messages.

Involving children

Children have occasionally been actively involved in public health education activities in Mali, including health education festivals and parades. For the 1999 NIDs, a radio station in the circle of Sikasso took a creative initiative of involving children in designing and conducting educational broadcasts urging parents to bring their children for the immunizations. The station won a prize, awarded by UNICEF, for the most creative broadcast. Involving children in educational activities has two clear advantages. First, children can be very effective in raising their parents' awareness about the importance of immunization. Parents are particularly interested in listening to their own children on radio broadcasts. Second, children's active involvement in preparing and disseminating information about immunization educates them both as children and as future parents themselves.

Programme needs for more effective social mobilization and communication support

Developing more cost-effective strategies

Currently, Mali's decision makers tend to interpret and implement social mobilization strategies, communication strategies and mass media campaigns as if they were virtually one and the same. Confusion in the distinctions between these interventions, in terms of their respective objectives, approaches, advantages and disadvantages, was evident in discussions during meetings of the National Steering Committee and National Organization Committee, during in-depth interviews and also in key documents. Given the high cost and the relatively low impact of mass media campaigns in rural Mali, it is particularly important to distinguish and to separate these campaigns

from other social mobilization and communication strategies. Similarly, relatively large investments were made in the production and limited distribution of t-shirts, banners and stickers for the NIDs. These materials have little demonstrated effectiveness as communication channels, and their impact – either as social mobilization tools that build goodwill among high-level officials in the government and civil society, or as items used to motivate volunteers and health personnel – remains unclear in visited areas in the Mopti region.

While the various strategies can indeed be complementary, as they are currently designed and implemented, there is a confused overlap that diminishes their respective potential outcomes. The following examples illustrate this point:

- During a meeting of the National Steering Committee, a member summarized his report on the absence of radio stations in one area by stating emphatically, "This place has absolutely no resources for social mobilization."
- In the final evaluation report of the 1998 NIDs, social mobilization strategies for the NIDs are described as follows:
 - develop supports: information guide, stickers, t-shirts, caps, banners;
 - order materials (megaphones) to add to the existing supply;
 - create banners and radio and television programmes in French and the nine local languages;
 - develop a broadcast schedule and programmes for the written press;
 - conduct regional visits by National Organizing Committee members to support final aspects of social mobilization and planning;
 - train journalists to improve the quality of messages broadcast on the radio, in newspapers and on TV; and
 - train traditional chiefs in Kidal to adapt activities to the sociocultural context of the region.

Budgets over the past three years of NIDs have prioritized investments in mass media well over other forms of communication and other means of mobilizing communities, particularly in rural areas.

The current NIDs strategies need to be more judiciously balanced, with a careful consideration of the potential impact, cost and audiences reached by each approach. While mass media can be an effective way to inform populations, it is expensive and has its limits, particularly in reaching and educating rural women. As discussed in the previous section, women mobilized rapidly in rural areas even without the influence of mass media. Some of the considerable funds and additional resources that are currently being invested in mass media campaigns could be more useful if they were invested in improved social mobilization and communication strategies that educate people more about all immunizations, and involve communities more actively in local planning for both the NIDs and the EPI.

The challenge for the National Steering Committee, and the donors who have contributed such vast resources for the NIDs, is to carefully assess and improve the cost-effectiveness of all of these strategies before continuing to make such large investments. Given the momentum gained from three years of experience, and the indisputably vested interests of various organizations, agencies and individuals in keeping the budget lines and strategies as they are, this is indeed a considerable challenge.

Prioritizing interpersonal communication and social networks

Interpersonal communication is without question the most important mechanism to disseminate information to women, particularly in the rural areas. Nevertheless, in stark contrast to mass media, interpersonal communication received minimal attention in the NIDs communication strategy. Although they were identified within the social mobilization strategies, the following activities, which have enormous potential to both mobilize and promote communication in rural communities, received very limited support:

- using town criers or *griots* with *tam-tams* (drums) to announce the date and immunization sites for the NIDs;
- informing/orienting village and neighbourhood chiefs who, in turn, informed their communities about the NIDs by sending messengers door to door;

- holding information meetings through CAFO, the coordinating structure for women's
 associations, whose representatives helped to mobilize women to bring their children to the
 NIDs; and
- requesting imams and other religious leaders to transmit information about the dates and immunization sites of the NIDs to their congregations.

As extremely valuable resources for interpersonal communication, town criers, village and neighbourhood chiefs, women's formal and informal networks and religious leaders need more support in terms of orientation, training and capacity building. In the current communication strategies for the NIDs, journalists and health personnel are given the priority for these opportunities. An important exception is the case of the chiefs of the nomadic clans in northern Mali, who have participated in seminars and planning workshops.

In addition to the groups already mentioned, future social mobilization strategies for NIDs, routine immunization and other health programmes should seek to involve other community groups, such as youth associations, traditional midwives and traditional healers. All of these groups should be consulted and involved actively and early on in the planning phases at the local level.

Increasing community involvement

The NIDs social mobilization strategy currently includes a limited array of community groups whose role is primarily to passively follow instructions they have received from higher-level authorities. For future NIDs, as well as for the routine immunization programme, a greater emphasis needs to be placed on developing strategies that encourage a more active and involved participation from these different community groups.

While women turned out in large numbers to bring their children to the NIDs, their participation was also passive and essentially uninformed. In most cases, women were not involved in decision-making or planning for the NIDs. Male community leaders, meanwhile, were involved only in implementing mobilization strategies that had already been set in place by the steering and organizing committees. Again, an important exception to this lack of community involvement was found in the northern region of Kidal, where nomadic clan chiefs (men) were involved in the planning phase.

Mali's NIDs and EPI strategies have a useful resource for social mobilization through collaboration with ASACO and the National Federation of Community Health Associations (FENASCOM). These organizations are composed of elected representatives of villages, communes and regions and could offer a mechanism for increasing community involvement. Although the FENASCOM is a member of the National Steering Committee, there is no strategic plan to actively involve community health associations in social mobilization activities at the community level.

A serious limitation with both the FENASCOM and the ASACO that must be pointed out is the extremely low representation of women within these structures: more than 95 per cent of the members are men. Social mobilization strategies for NIDs, routine immunization and other public health programmes should include efforts to significantly increase women's participation in these structures as well as to support other structures, such as CAFO and women's informal groups (for example, *tontines*), to increase women's involvement.

Adding basic health education to the communication strategy

The social mobilization and communication strategies for the NIDs focus on informing the population about the dates and locations of the NIDs, but lack basic education about immunization. Although the Malian population understands that immunizations are 'important' or 'good for the child', there is limited knowledge about which diseases are prevented by immunizations. Most of the women interviewed for the case study were not aware of the purpose of the NIDs, and although they did have a vague understanding that immunizations are 'good for children', they had no idea what diseases were prevented by immunizations. A common misperception in the rural population is that immunizations protect children against malaria, an erroneous belief that can lead to disappointment and doubts about the effectiveness of immunizations when children eventually do become ill from this disease.

The population also receives little or no education about the link between the NIDs and routine immunizations, which has created some confusion over the effectiveness of the latter. Another element of confusion in the public perception of the two immunization strategies is the cost: while people pay nothing to have their children immunized at the NIDs, EPI requires a fee (100FCFA) for children's immunization card. Since parents usually do not receive any education about the

purpose of the card, and do not know how to interpret it themselves, many are unwilling to pay this nominal fee.

Some of the topics that need to be covered in educational activities for the NIDs as well as for routine immunizations include:

- the diseases prevented by immunizations;
- the number of times a child needs to be immunized to be completely protected;
- when a child should return for the next immunization;
- possible side effects from immunizations and what can be done to relieve them;
- the demystification of the immunization card for children; and
- the link between NIDs and routine immunizations.

Mobilization without information

A young woman vendor was at the Bankass marketplace with her baby. She had heard about the NIDs that very morning, while arranging her merchandise to sell. Since the vaccinations were being held at the marketplace, she stood in line with her baby, who received polio drops and vitamin A drops. She told the team members that she had no idea what the drops were for, except that they were "good for children."

An elderly Dogan market woman had heard about the NIDs the evening before from the town crier. She said that she knew that vaccinations are "good for children's health," but had no idea which diseases are prevented. "All I know is that the town crier said that all mothers should bring their children here today to be immunized," she explained. "What are the immunizations for? I don't know."

Six women were pounding millet a kilometre away from a NIDs site. They had all brought their children there for immunizations a couple of hours before. When asked if they knew what diseases were prevented by vaccinations, they hesitated, smiling. Two women guessed "malaria."

Identifying and utilizing gender-appropriate communication and social mobilization strategies

Mali's social mobilization and communication strategies are 'gender-blind', and consequently have missed a number of opportunities to increase their effectiveness and sustainability at the community level. Challenges to be addressed in future strategies for NIDs, EPI and AFP surveillance include the following

Representation of women in decision-making committees is low

The limited number of women involved at the national and regional levels in the design and planning of the NIDs may be part of the reason why the needs and attributes of women, who are the main caretakers of children and who are the ones to mobilize in large numbers throughout the country to attend the NIDs, are rarely prioritized in most of the social mobilization and communication strategies. The overwhelming majority of the members on committees that are responsible for developing strategies and guidelines, providing technical input and supervision and supervising the entire process of preparing and implementing the NIDs (and other health-related strategies) are men. These committees include: the NIDs steering committees and organization committees (at both national and regional levels), FENASCOM and community health associations (at village, circle and commune levels).

Women have low participation in high-level NIDs planning and decision-making

Sixteen participants attended a NIDs organization committee meeting in the Mopti region. Only one of these participants was a woman. She had not been invited, and had only found out about the meeting at the last minute by chance!

There are very few communication materials for women, and virtually no messages for men. The IEC strategy for the NIDs, as well as for EPI, needs a conceptual review that takes gender into account. The majority of the resources available for the communication strategy were invested in media that do not adequately reach women (i.e., television, radio, newspapers, t-shirts, banners and stickers), especially in rural areas. Ironically, while the audience for most of these media is typically male, few or no messages were developed specifically for men.

As a consequence, while men may have been exposed to more information about the NIDs than women have, they did not feel directly concerned in mobilizing for the NIDs. Future communication strategies for NIDs, routine immunizations and other health programmes should therefore emphasize a careful plan to develop specific messages for men and to promote their participation. Interpersonal communication, meanwhile, is unquestionably the most effective means to inform and educate women and should receive much more attention in future communication strategies for NIDs and for routine immunization. There is also a need for more creativity in developing complementary IEC materials that are appropriate for women. For example, Africare, an NGO working in the Dioro commune of the Segou region, developed very effective and

innovative IEC materials for health education by using songs, storytellers and women's apparel (e.g., the cloth women wrap around them to help them carry babies on their back) to transmit messages and prompt health behaviours.

"Radios are for men!"

A group of six women pounding millet in a village in Bankass commune had heard about the NIDs from a local announcer who had made door-to-door visits in their village to inform families that very morning. Three had babies on their backs. They laughed when asked if they had heard about the NIDs on the radio. "We don't have radios in our homes. We can't afford them. Besides, radios are for men! If a woman ever dared to touch her husband's radio, she'd surely be reprimanded."

Training opportunities for women are limited..

Training strategies for the NIDs are also gender-biased, again prioritizing men. Available resources went primarily to training (male) radio journalists while little investment was made in training women's associations (both formal and informal groups), as well as other people (for example, town criers/griots, traditional midwives) who are more likely to have regular contact and communication with rural women.

The present discussion does not mean to imply that social mobilization and communication strategies in Mali should only target women or that they should avoid the use of mass media. However, it seems that the current use of mass media has limited impact in terms of gender and therefore should be improved. A two-pronged approach is suggested to improve the cost-effectiveness of communication strategies involving mass media:

- 1. First, develop messages specifically for men, who compose the majority of the mass media audience.
- Second, identify and invest more in other communication channels that are more appropriate for women and rural communities in general.

Assuring the complementarity of NIDs, EPI and surveillance

While the NIDs' social mobilization and communication strategies could offer an important boost for the routine immunization programme, their current design and implementation should be revised to take into account the reported detrimental influences of the NIDs on EPI. These include:

Public confusion over the quality and importance of EPI, given the priority and prestige accorded to NIDs

Without adequate public education to explain the link between NIDs and EPI, there is a danger of creating the following misperceptions among the general population:

- confusion about the quality of routine immunizations, which may be perceived as being less effective and/or less important than the immunizations provided during the NIDs;
- confusion about vaccination status (i.e., assuming that if a child has received vaccines during the NIDs, then she or he has been completely vaccinated);
- adoption of passive care-seeking attitudes and behaviours concerning immunizations, since immunization teams during the NIDs go village to village and even door to door; and
- confusion and distrust caused by the differences in costs that people incur for EPI immunizations and for immunizations given during the NIDs; while people are required to pay for vaccination cards in order for their children to be routinely immunized (the actual cost is 100 FCFA per vaccination card), they are not required to have vaccination cards (and thus not required to pay anything) for the NIDs.

Competition for resources

In spite of having a large and separate budget, the NIDs nevertheless compete with EPI for resources. NIDs can severely shorten the amount of time and people available to conduct routine immunizations and other activities. Health programme activities in Mali are already brought to a virtual standstill during the rainy season, which lasts three to four months each year. With the international pressure to prioritize the NIDs above all other activities, an additional four to five months are diverted away from EPI and other health programmes. Key EPI personnel are preoccupied with preparations for two months prior to the NIDs and with reporting procedures for two months following the NIDs. The combined amount of time taken by the rainy season and the NIDs means that key personnel have only three or four months per year to devote to EPI and other health programme activities.

Tremendous amounts of money have been devoted to t-shirts and banners, even though the costeffectiveness of these materials seems low. Even half of the funds used for these materials could have helped both the NIDs and the EPI if they had been invested instead in transportation and improving the cold chain.

Lack of synergy with other polio eradication efforts

From its inception, Mali's NIDs were never clearly linked, either conceptually or programmatically, with AFP surveillance and EPI. Again, due to the high priority given to the NIDs, NIDs have become an end in themselves rather than part of a three-pronged approach for the eradication of polio.

Less than a week before the first round of the 1999 NIDs were to be held, the National Steering Committee heard about AFP surveillance for the very first time from a WHO consultant. The Committee has been responsible for guiding and overseeing the entire process of planning, preparing and implementing the NIDs for three years and seems to have never made the connection with AFP surveillance. Although the National Steering Committee members rapidly disseminated the information they received during the presentation to other committee members and health personnel during their site visits to the regions and communes, there is a need to strengthen the systematic integration of AFP surveillance into NIDs activity planning.

Improving monitoring and evaluation

Health personnel realize that coverage rates exceeding 100 per cent usually indicate one or a combination of the following problems:

- an underestimation of the actual number of children targeted for immunization;
- including immunized children of migrant or border populations in coverage rate calculations for a fixed population; and
- immunizing children over the age of five years old.

Nevertheless, many health personnel and their collaborators in other government sectors and the civil sector continue to use these extremely high coverage rates as indicators of success.

Calculating coverage rates: Can 'more' be 'better'?

"Our commune did even better than many of the other communes in the region," proudly declared one EPI staff member. "Their NIDs only had coverage rates of 112 per cent or 115 per cent but ours reached 130 per cent!"

The NIDs and the EPI programmes need improved population statistics in order to have a clearer idea of true coverage rates. Moreover, programmes need strategies to promote the active use of data to follow-up on drop-outs since immunization data from the NIDs as well as from the EPI seem to be used almost exclusively for reporting purposes.

Some promising initiatives in data management have developed within the Pivot Group, whose NGOs are beginning to use immunization data as part of a social mobilization strategy. In some of their programme areas, the NGOs regularly use the data to provide feedback to and promote dialogue with communities. Volunteers collaborating with the NGOs are also trained to use immunization data to know how many and which children in their communities will need immunizations each month. The government health system may benefit from learning more about these experiences from the Health Pivot Group.

Summary of lessons learned

- Initiate intersectoral collaboration to maximize the support and resources available for interventions.
- 2. Identify an effective 'champion' who can influence decision makers and effectively lobby for resources and support for a programme at the national level.
- Increase the active and early involvement of communities in designing, planning, implementing
 and monitoring strategies to improve the effectiveness and sustainability of communityoriented programs.
- 4. Involve traditional community leadership structures.
- 5. Incorporate women's formal and informal networks in communication and social mobilization strategies, providing capacity-building support as necessary.
- Involve non-governmental organizations in the design, planning and implementation of strategies, taking advantage of their experiences in mobilizing communities.

- 7. Develop a multimedia communication strategy that utilizes appropriate and cost-effective approaches, channels and messages.
- 8. In countries where mass media have limited coverage and impact, prioritize interpersonal communication and social networks, and utilize mass media only as a complementary approach.
- 9. Add basic health education to communication strategies.
- 10. Identify and utilize gender-appropriate strategies that take into account the attributes and preoccupations of women as well as men.
- 11. Assure the complementarity of NIDs, EPI and AFP surveillance as part of a three-pronged approach to polio eradication by promoting a synergy between the strategies and in the allocation of resources.
- 12. Improve monitoring and evaluation.
- 13. Involve children as active participants in IEC strategies, such as radio broadcasts, and also in mobilization strategies.

Annex A: List of persons interviewed

Bamako

Dr. Bruno Martin, UNICEF, Child Survival

Mamadou Kante, Plan International, Chief, Department of Health

Dr. Haidara Ousmane, Plan International

Keita Moussa, Secrétaire Géneral de l'URTEL (Union des Radios et des Televisions Libres du Mali)

Dr. A. Diawara, EPI Manager of CNI (Centre National d'Immunisation)

Felix Sidibe, Director of CNIECS (Centre National d'Information et d'Education et de communication sur la Santé)

Dr. Coulibaly Youma Sall, Physician, Centre de Santé de la Commune VI

Sikasso

Dr. Oumar Bah, Physician, Medecin Chef de la Direction Régionale de Santé Publique

Daouda Mariko, Director of Radio Kenedougou

Abdoulaye Maiga, Chief of the Division Promotion des Collectivités, Direction Régionale de l'Action Sociale

Mrs. Assitaw Coulibaly, Regional Coordinator of the Promotion of Women

Mrs.Adama Mbamba, President of the NGO Club des Meres

Mrs. Assa Camara, Responsible of women in the neighbourhood

Kaara

Youssou Sangare, Nurse ICPM (Infirmier Chef de Poste Medical)

Alima Doulia, Traditional birth attendant, Member of the village health committee (VHC)

Mariam Sangare, Animator in nutrition, member of the VHC

Sita Sangare, Animator in nutrition nutrition, member of the VHC

Zacharia Sangare, Vice-President of VHC

Kolondieba

Segou Namane, Technicien de Développement Communautaire (TDC) et animateur de la radio La Voix du Tchedougou

Representative of the government

Dr. Drissa Awatara, Physician

Souleyman Batie Kone, Director of a Rural Radio, Benso

Lamine Mariko, Animator of a rural radio, Benso

Amara Sapara, Chief of the Social Service, Centre de Santé de Réference

Mamadou Cissé, Mayor

Raki Dansira, Director of a school and coordinator of women's association

Mrs.Ramata Konate, Teacher and President of the Association for the Development and the Promotion of Women

Mamtou Fane, town crier

Aminata Sidibe, mother of eight

Assita, mother of three, wife of the Imam

Balkina Coulibaly, 18 years old, one deceased child

Schoolchild, 13 years old

Save the Children

Mrs. Kadiatou Aminata, Health Programme Coordinator Mamadou Coulibaly, Responsible for Water Programmes Mr. Diawara, Responsible for Savings and Credits Mr. Diamane Kone, Responsible for the information Systems The coordinator of the Education Sector

Village de Mena
Sedou Konde, Mayor of Mena
Mr. Sangare, Chief of the village in Meena
Isaka Mbaba, Nurse, ICPM
Abdoulaye Kone, President of the FELASCOM
Maimouna Sangare, mother of three

Cercle de Bougouni

Mambi Keita, Chief of the Medical Post in Bougouni
Mr. Sidibe, Representative of the government
Dr. Abdoulaye Bakayoko, Coordinator, Save the Children
Zana Sanogo, Responsible for the local EPI bureau
Seydou Kamara, Representative of the government in Koumantou
Brahima Kone, Chief of the Medical Post in Koumantou
Kone Pié, President d'ASACO
Moussa Diko, Teacher
Bekaye Bagayogo, Chief of Neighbourhood
Bisi Diakate, Chief of the Neighbourhood of Dougoumina
Rokia Sangare, President of Women

Kadiolo:

Kalifa Drame, *Griot* of the Dogons Kadija Traore, mother